

Amendments to the Claims (this listing replaces all prior listings):

1. (Previously presented) A method of designing a semiconductor device, the method comprising:

providing a plurality of component design parameter files in a data repository, each of the component design parameter files associated with a discrete circuitry component and including an estimated silicon area required to construct the discrete component, the circuitry components including at least some components selected from the group consisting of an AND gate, an OR gate, a NAND gate, a NOR gate, an XOR gate, a latch, and a flip-flop;

maintaining a circuit design parameter file for a circuit being designed, the circuit design parameter file specifying a physical characteristic of the circuit an estimated total silicon area for the circuit being designed;

monitoring a design environment to detect the addition of a circuitry component to the circuit,

determining a type of circuitry component added to the circuit being designed;

accessing a component design parameter file associated with the determined type of circuitry component that specifies the estimated silicon area required to construct the at least one design parameter for that added circuitry component;

updating the circuit design parameter, wherein updating includes adding the specified estimated silicon area required to construct the added circuitry component to the estimated total silicon area maintained based on the at least one design parameter included in the component circuit design parameter file so that the estimated total silicon area includes the silicon area required to construct the added circuitry component; and

providing the circuit designer with feedback concerning the physical characteristic estimated total silicon area of the circuit being designed.

2. (Cancelled)

3. (Original) The method of claim 1 further comprising allowing the circuit designer to request feedback concerning the ~~physical characteristic~~ estimated total silicon area of the circuit being designed.

4. (Previously presented) The method of claim 3 further comprising providing the circuit designer with feedback concerning the ~~physical characteristic~~ estimated total silicon area of the circuit being designed in response to the circuit designer requesting feedback.

5-14. (Canceled)

15. (Original) The method of claim 1 further comprising monitoring a design environment to detect the deletion of a circuitry component from the circuit being designed.

16. (Original) The method of claim 15 further comprising accessing a component design parameter file that specifies ~~at least one design parameter~~ the total silicon area for that deleted circuitry component.

17. (Original) The method of claim 16 further comprising updating the circuit design parameter file based on the ~~at least one design parameter~~ total silicon area included in the component design parameter file for that deleted circuitry component.

18-37. (Canceled)

38. (New) A method of designing a semiconductor device, the method comprising:

- providing a plurality of component design parameter files in a data repository, each of the component design parameter files associated with a discrete circuitry component and including a number of gates required to construct the discrete component, the circuitry components including at least some components selected from the group consisting of an AND gate, an OR gate, a NAND gate, a NOR gate, an XOR gate, a latch, and a flip-flop;
- maintaining a circuit design parameter file for a circuit being designed, the circuit design parameter file specifying total number of gates required to construct the circuit being designed;
- monitoring a design environment to detect the addition of a circuitry component to the circuit,
- determining a type of circuitry component added to the circuit being designed;
- accessing a component design parameter file associated with the determined type of circuitry component that specifies number of gates required to construct the determined type of circuitry component;
- updating the circuit design parameter, wherein updating includes adding the specified number of gates required to construct the determined type of circuitry component to the estimated number of gates required to construct the circuit being designed maintained in the circuit design parameter file so that the estimated total number of gates required to construct the circuit being designed includes the number of gates required to construct the added circuitry component; and
- providing the circuit designer with feedback concerning the estimated total number of gates required to construct the circuit being designed.

39. (New) The method of claim 38 further comprising allowing the circuit designer to request feedback concerning the estimated total number of gates required to construct the circuit being designed.

40. (New) The method of claim 39 further comprising providing the circuit designer with feedback concerning the estimated total number of gates required to construct the circuit being designed in response to the circuit designer requesting feedback.

41. (New) The method of claim 38 further comprising monitoring a design environment to detect the deletion of a circuitry component from the circuit being designed.

42. (New) The method of claim 41 further comprising accessing a component design parameter file that specifies the total number of gates for that deleted circuitry component.

43. (New) The method of claim 41 further comprising updating the circuit design parameter file based on the total number of gates included in the component design parameter file for that deleted circuitry component.

44. (New) A method of designing a semiconductor device, the method comprising:
providing a plurality of component design parameter files in a data repository, each of the component design parameter files associated with a discrete circuitry component and including a number of transistors required to construct the discrete component, the circuitry components including at least some components selected from the group consisting of an AND gate, an OR gate, a NAND gate, a NOR gate, an XOR gate, a latch, and a flip-flop;

maintaining a circuit design parameter file for a circuit being designed, the circuit design parameter file specifying total number of transistors required to construct the circuit being designed;

monitoring a design environment to detect the addition of a circuitry component to the circuit,

determining a type of circuitry component added to the circuit being designed;

accessing a component design parameter file associated with the determined type of circuitry component that specifies number of transistors required to construct the determined type of circuitry component;

updating the circuit design parameter, wherein updating includes adding the specified number of transistors required to construct the determined type of circuitry component to the estimated number of transistors required to construct the circuit being designed maintained in the circuit design parameter file so that the estimated total number of transistors required to construct the circuit being designed includes the number of transistors required to construct the added circuitry component; and

providing the circuit designer with feedback concerning the estimated total number of transistors required to construct the circuit being designed.

45. (New) The method of claim 44 further comprising allowing the circuit designer to request feedback concerning the estimated total number of transistors required to construct the circuit being designed.

46. (New) The method of claim 45 further comprising providing the circuit designer with feedback concerning the estimated total number of transistors required to construct the circuit being designed in response to the circuit designer requesting feedback.

47. (New) The method of claim 44 further comprising monitoring a design environment to detect the deletion of a circuitry component from the circuit being designed.

48. (New) The method of claim 47 further comprising accessing a component design parameter file that specifies at number of transistors for that deleted circuitry component.

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Serial No. : 09/941,519
Filed : August 29, 2001
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Attorney's Docket No.: 10559-605001 / P12889

49. (New) The method of claim 48 further comprising updating the circuit design parameter file based on the number of transistors included in the component design parameter file for that deleted circuitry component.